



US 20210097435A1

(19) **United States**(12) **Patent Application Publication**  
**Soto et al.**(10) **Pub. No.: US 2021/0097435 A1**(43) **Pub. Date: Apr. 1, 2021**(54) **SYSTEMS AND METHODS FOR TARGET  
DEVICE PREDICTION***G06F 3/0481* (2006.01)*G06F 3/0488* (2006.01)*G06N 5/04* (2006.01)(71) Applicant: **Sonos, Inc.**, Santa Barbara, CA (US)(52) **U.S. Cl.**(72) Inventors: **Kurt Thomas Soto**, Ventura, CA (US);  
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(US)CPC ..... *G06N 20/00* (2019.01); *G06F 3/165*  
(2013.01); *G06N 5/04* (2013.01); *G06F*  
*3/04883* (2013.01); *G06F 3/0481* (2013.01)(73) Assignee: **Sonos, Inc.**, Santa Barbara, CA (US)

(57)

**ABSTRACT**(21) Appl. No.: **16/672,280**(22) Filed: **Nov. 1, 2019****Related U.S. Application Data**(60) Provisional application No. 62/907,367, filed on Sep.  
27, 2019.**Publication Classification**(51) **Int. Cl.***G06N 20/00* (2006.01)*G06F 3/16* (2006.01)

Systems and methods for training prediction models are illustrated. One embodiment includes a method for training a prediction model in a network. The method includes steps for receiving context data for a portable device in a system, wherein the context data includes localization data that describes a location of the portable device, identifying a predicted stationary device from several stationary devices that is predicted based on the context data using a prediction model, receiving input identifying a target stationary device from the several stationary devices, generating training data based on the predicted stationary device and the received input, updating the prediction model based on the generated training data.

